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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,390

09/27/2006

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EXAMINER

DANG, KET D

ART UNIT

PAPER NUMBER

3742

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,390	<b>Applicant(s)</b> RUDOLPH ET AL.	
	<b>Examiner</b> KET D. DANG	<b>Art Unit</b> 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This office action is responsive to the amendment filed on August 14, 2009. As directed by the amendment: claims 1-2 and 15-16 have been amended and claims 19-23 have been added. Thus, claims 1-23 are presently pending in this application.

#### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in Germany Parent Application No. 20 2004 010 386.9, filed on July 1, 2004.

#### ***Specification***

3. The amendment filed on August 14, 2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added limitations which are not supported by the original disclosure are as follows: "a first side mobile welding", "a second side mobile welding", "a first side adjusting unit", "a first side feed drive", "a second side adjusting unit", "a second side feed drive" in the new claims 22 and 23.

Applicant is required to cancel the new matter in the reply to this Office Action.

#### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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6. Claims 22 and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The added limitations which are not supported by the original disclosure are as follows: "a first side mobile welding", "a second side mobile welding", "a first side adjusting unit", "a first side feed drive", "a second side adjusting unit", "a second side feed drive" in the new claims 22 and 23. These are new matter.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-6, 8-9, 15, 19, and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Penman (US 4,733,814).

9. Regarding claim 1, Penman discloses a pressure welding machine comprising a frame 10 (Fig. 1); two mobile welding heads 18 (Fig. 1, the other head is on the opposite end), which are movable on said frame along a feed axis 17 (Fig.1); two adjusting units with feed drives acting on welding heads, two adjusting units 11/12 (Fig. 1, the other adjusting unit is on the opposite end) (Col. 2, lines 61 – Col. 3, lines 12) are being mounted axially movably at frame; a common adjusting element 22 (Fig. 1), said

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two adjusting units being connected to one another by said common adjusting element and each being supported by said common adjusting element 22 (Fig. 1) (col. 3, lines 10 and an adjusting drive 25 (Fig. 1) for driving said common adjusting element for positioning each of said two adjusting units, said adjusting units 11/12 (Fig. 1) being connected to said adjusting drive by means of common adjusting element and being supported by said common adjusting element 22 (Fig. 1) with forces exerted by each of said two adjusting units being transmitted to said common adjusting element to relieve load on said frame 10 (fig. 1).

10. Regarding claims 2-6, 8-9, 15, and 19, Penman discloses the claimed invention including wherein common adjusting element 22 (Fig. 1) is designed as a continuous spindles with two threads 24 (Fig. 1, thread is defined in the Encarta Dictionary as “something connecting elements”), which are directed in opposite directions; wherein threads are designed as motion threads, comprising ball (Col. 3, lines 36-42); wherein spindle 22 (Fig. 1) is arranged under welding heads 18 (Fig. 1, the other head is on the opposite end) and adjusting units in machine bed of frame 10 (Fig.1); wherein adjusting drive a has a controllable motor comprising an electric motor 28 (Fig. 1), for driving spindle 22 (Fig. 1); wherein frame 10 (Fig. 1) has a carriage guide for the positive-locking mounting and guiding of travel carriages of the welding heads 18 (Fig. 1, the other head is on the opposite end) and adjusting units 11/12 (Fig. 1, the other adjusting unit is on the opposite end); wherein central clamping device (Col. 3, lines 12-18) has two spaced workpiece holders 20 (Fig.1, the other holder is on the opposite end), which have holder carriages mounted movably at carriage guide (Col. 3, lines 2-9); wherein

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workpiece holders are connected to their respective associated adjusting unit 11 (Fig. 1) by a carriage adjuster; wherein said pressure welding machine comprises a friction welding machine with each of said welding heads having a rotary drive for rotating a corresponding workpiece in relation to said central workpiece for friction welding (abstract, rotatable holders).

11. Regarding claims 22-23, Penman discloses a pressure welding machine comprising: a frame 10 (Fig. 1); a first side mobile welding head 18 (Fig. 1, prior art was not labeled) movably mounted on said frame for movement along a feed axis 17 (Fig.1); a second side mobile welding head 18 (Fig. 1) movably mounted on said frame for movement along said feed axis 17 (Fig.1); a first side adjusting unit 11 (Fig. 1, prior art was not labeled/pointed correctly) with a first side feed drive acting on said first side mobile welding head 18 (Fig. 1, prior art was not labeled) with resulting upsetting forces first side adjusting unit, said first side adjusting unit being mounted axially movably at said frame 10 (Fig. 1); a second side adjusting unit 18 (Fig. 1) with a second side feed drive acting on said first side mobile welding head 18 (Fig. 1, prior art was not labeled) with resulting upsetting forces at said second side adjusting unit 12 (fig. 1), said second side adjusting unit being mounted axially movably at said frame 10 (Fig. 1); a common adjusting element 22 (Fig. 1), said two adjusting units 11/12 (Fig. 1) being connected to one another by said common adjusting element and each being supported by said common adjusting element with resulting upsetting forces at said second side adjusting unit transmitted from said first side adjusting unit to said common adjusting element and with resulting upsetting forces at said second side adjusting unit transmitted from said

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second side adjusting unit to said common adjusting element to provide a closed frictional connection between said first side adjusting unit and said second side adjusting unit to relieve load applied by said first side adjusting unit and said second side adjusting unit on said frame; and an adjusting drive for driving said common adjusting element for positioning each of said two adjusting units 11/12 (Fig. 1, the other adjusting unit is on the opposite end) (Col. 2, lines 61 – Col. 3, lines 12); a travel carriage 13 (fig. 1) associated with each of said welding heads 18 (Fig. 1, prior art was not labeled) and said adjusting units 11/12 (Fig. 1, the other adjusting unit is on the opposite end); a carriage guide for the positive-locking mounting and guiding of said travel carriages of the welding heads and said adjusting units, wherein said common adjusting element 22 (Fig. 1) comprises a continuous single part spindle with two threads, said two threads being directed in opposite directions and with nuts engaging said threads 24 (Fig. 1, thread is defined in the Encarta Dictionary as “something connecting elements”), each of said nuts being connected to a respective one of said first adjusting unit and said second adjusting unit, wherein said threads are motion threads comprising ball (Col. 3, lines 36-42) for moving each nut along said spindle 22 (Fig. 1) upon said adjusting drive driving said spindle in rotation with rotation of said spindle moving said first adjusting unit 11 (Fig. 1, prior art was not labeled/pointed correctly) and said second adjusting unit 12 (fig. 1) along said frame 10 (Fig. 1).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 16-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penman (US 4,733,814) in view of Palmer (US 4,414,046), and further in view of Kuchuk-Yatsenko et al. (US 4999476).

14. Regarding claims 16-17 and 20, Penman discloses a method for pressure welding a plurality of workpieces along common feed axis 17 (Fig.1), the method comprising a pressure welding machine with a frame 10 (Fig.1), two welding heads 18 (Fig. 1, the other head is on the opposite end) movable on said frame along a feed axis 17 (Fig.1), and two adjusting units 11/12 (Fig. 1, the other adjusting unit is on the opposite end) (Col. 3, lines 10-12) with feed drives for driving welding heads; moving outer workpieces are moved relative to one another by two adjusting units 11/12 (Fig. 1) mounted axially movably at frame 10 (Fig. 1) and applying pressure welding forces from said adjusting units to respective said welding heads (Col. 3, lines 45 – Col. 4, lines 8); connecting said two adjusting units 11/12 (Fig. 1) to one another by a common adjusting element 22 (Fig. 1) with an adjusting drive 25 (Fig. 1) for driving said common adjusting element for positioning each of said two adjusting units; mutually supporting said adjusting units 11/12 (Fig. 1) in an adjustable manner with the common adjusting element 22 (Fig. 1) while absorbing the pressure welding forces at the common adjusting element with the common adjusting element and supported adjusting units forming a closed system of forces (Col. 3, lines 45 – Col. 4, lines 8).



Penman fails to disclose wherein adjusting units and a central clamping device are positioned simultaneously and synchronously for a central workpiece; and a machine for welding with moving arc.

However, Palmer teaches wherein adjusting units and a central clamping device are positioned simultaneously (Col. 2, lines 51-54) and synchronously for a central workpiece (Col. 2, lines 40-50). Kuchuk-Yatsenko discloses a machine for welding with moving arc (title; Col. 1, lines 8-11, lines 34-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Penman's reference, to include supporting adjusting units and wherein adjusting units and a central clamping device are positioned simultaneously and synchronously for a central workpiece, as suggested and taught by Palmer and Kuchuk-Yatsenko, for the purpose of stability of the system, achieving uniform rotation of the assembly, and better welding with all components are in synchronization (Col. 2, lines 51-61).

15. Claims 7, 10, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penman (US 4,733,814) in view of Gage (US 3,516,591) and further in view of Kuchuk-Yatsenko et al. (US 4999476).

16. Regarding claims 7, 10, and 21, Penman discloses the claimed invention, except for a mobile central clamping device for a central workpiece, which is mounted movably at carriage guide and guided between welding heads; wherein carriage adjusters have a carrier and a spring for relative evading motions at the connection point with workpiece holder; and a machine for welding with moving arc. However, Gage teaches a mobile central clamping device for a central workpiece, which is mounted movably at carriage

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guide and guided between welding heads (Abstract); and wherein carriage adjusters have a carrier 22 (Fig. 3) and a spring 112 (Fig. 3) for relative evading motions at the connection point with workpiece holder. Kuchuk-Yatsenko discloses a machine for welding with moving arc (title; Col. 1, lines 8-11, lines 34-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Penman's reference, to include a mobile central clamping device for a central workpiece and carriage adjusters, as suggested and taught by Gage and Kuchuk-Yatsenko, for the purpose of providing a flexibility and capability of the system during the welding operations.

17. Claims 11-14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penman (US 4,733,814) in view of Kimura (US 4,812,090).

18. Regarding claims 11-14 and 18, Penman discloses the claimed invention, except for a measuring means. However, Kimura teaches a measuring means 27 (Fig. 6) (Col.4, lines 58-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Penman's reference, to include a measuring means, as suggested and taught by Kimura, for the purpose of performing an accurate and efficient on the workpiece (Col. 2, lines 8-12).

### ***Response to Amendment/Arguments***

19. Applicant's amendments have overcome claim 16 objection and 35 U.S.C. 112 2<sup>nd</sup> rejections from the first non-final Office Action.

Applicant's arguments with respect to claims 1-10 and 15-17 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KET D. DANG whose telephone number is (571) 270-7827. The examiner can normally be reached on Monday - Friday, 7:30 - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Tu can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KET D DANG/

Examiner, Art Unit 3742

November 19, 2009

/TU B HOANG/

Supervisory Patent Examiner, Art Unit 3742